Strangeness in Quark Matter 2016



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## $\Upsilon$ production measurements in p-Pb and Pb-Pb collisions with ALICE at the LHC

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Heavy quarkonium states are expected to provide essential information on the properties of the deconfined state of nuclear matter, the Quark-Gluon Plasma (QGP), formed in the early stages of ultra-relativistic heavy-ion collisions.

In particular, the suppression of the strongly bound quarkonium states via the color screening mechanism can be seen as an effect of deconfinement.

Furthermore, a weaker suppression is foreseen going from mid- to forward rapidity due to the decrease of the medium energy density.

ALICE results on charmonium suppression in Pb-Pb collisions seem to indicate that additional mechanisms as  $J/\psi$  production via recombination of charm and anti-charm quarks also play a role, leading to a more complex picture of the quarkonium melting in the QGP.

This so-called regeneration mechanism is expected to be small for bottomonia due to the smaller number of initial  $b\bar{b}$  pairs produced compared to  $c\bar{c}$  pairs.

In ALICE,  $\Upsilon$  are measured down to zero transverse momentum via the dimuon decay channel in the Forward Muon Spectrometer (2.5 < y < 4).

After a brief description of the apparatus, we will report on the  $\Upsilon$  nuclear modification factor in p-Pb collisions at  $\sqrt{s_{\text{NN}}} = 5.02$  TeV and in Pb-Pb collisions at  $\sqrt{s_{\text{NN}}} = 2.76$  and 5.02 TeV.

Finally, comparisons with other experimental measurements as well as with theoretical calculations will be discussed.

## On behalf of collaboration:

ALICE

Primary author: LARDEUX, Antoine (CEA/IRFU, Centre d'etude de Saclay Gif-sur-Yvette (FR))

Presenter: LARDEUX, Antoine (CEA/IRFU,Centre d'etude de Saclay Gif-sur-Yvette (FR))

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